

CLAIMS

We claim:

1. A medical electrode for measuring electrical impedance in a patient body, comprising:

5 an elongated, electrically non-conductive support surface (1), which is adhesive on one side, and one end of which has a form of a connecting strap (1') for attaching the electrode to electrical connections;

two contact strips (2a, 2b), electrically insulated from each other, comprising electrically conductive aluminum composite foil as the electrode material, the contact strips being
10 adhered to the support surface (1) on the adhesive side thereof, forming a bonding structure with an electrically conductive, skin-compatible adhesive with recessing of connection straps (2a', 2b') on surfaces of the contact strips facing away from the support surface (1), and being shaped at a connection end of the support surface (1) into respective connection straps (2a', 2b'); and

a removable protective covering for the adhesive surfaces of the support surface (1)
15 and the contact strips (2a, 2b) that come into contact with the patient body during use;

wherein a length of the contact strips (2a, 2b) is in a range of about 50 to 600 mm.

2. The electrode according to claim 1, wherein, except where the contact strips (2a, 2b) are shaped into connection straps (2a', 2b'), the two contact strips (2a, 2b) extend essentially parallel to one another with a separation of about 15 to 50 mm and have a width of about 3 to 10 mm.

20 3. The electrode according to claim 1, wherein, except in an area where the contact strips are shaped into connection straps (1', 2a', 2b'), a separation distance between outer edges of the contact strips (2a, 2b) and an outer edge of the support surface (1) is about 1 to 20 mm.

4. The electrode according to claim 1, wherein the support surface (1) comprises electrically non-conductive plastic foam that is adhesive on one side.

25 5. The electrode according to claim 4, wherein the adhesive on the one side of the support surface (1) is skin-compatible.

6. The electrode according to claim 1, wherein a geometry of the connection straps (1', 2a', 2b') matches that of standardized, commercially available electrical connections.

7. The electrode according to claim 1, wherein the electrode is an impedance
30 cardiography electrode.

8. The electrode according to claim 1, wherein the length of the contact strips (2a, 2b) is in a range of about 100 to 400 mm.

9. The electrode according to claim 8, wherein the length of the contact strips (2a, 2b) is in a range of about 150 to 300 mm.

5 10. The electrode according to claim 8, wherein the length of the contact strips (2a, 2b) is about 200 mm.

11. The electrode according to claim 2, wherein the contact strips (2a, 2b) have a separation of about 20 to 40 mm and have a width of about 4 to 7 mm.

10 12. The electrode according to claim 11, wherein the contact strips (2a, 2b) have a separation of about 25 to 30 mm and have a width of about 5 mm.

13. The electrode according to claim 3, wherein the separation distance is about 3 to 15 mm

14. The electrode according to claim 13, wherein the separation distance is about 4 to 12 mm.

15 15. The electrode according to claim 3, wherein the separation distance along longitudinal edges of the electrode is about 5 mm and the separation distance at the end of the electrode opposite the contact strips (1', 2a, 2b) is about 10 mm.

16. The electrode according to claim 6, wherein the geometry matches that for a terminal clip of neutral electrodes for HF surgery.